



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,767	11/03/2005	Martina Ebert	STOPPELMANN1	6941
1444	7590	06/03/2009	EXAMINER	
BROWDY AND NEIMARK, P.L.L.C.			USELDING, JOHN E	
624 NINTH STREET, NW				
SUITE 300			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20001-5303			1796	
MAIL DATE		DELIVERY MODE		
06/03/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/526,767	<b>Applicant(s)</b> EBERT ET AL.
	<b>Examiner</b> JOHN USELDING	<b>Art Unit</b> 1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 06 May 2009.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-8 and 10-18 is/are pending in the application.  
 4a) Of the above claim(s) 10-12 and 17 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-8, 13-16 and 18 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_

5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-8 and 13-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not support the limitation "the molding compound being substantially free of any other filler". Although it is appreciated that the particular embodiments of the molding compound mentioned in Applicants' Specification are, themselves, devoid of any other filler, there is no evidence that Applicant had contemplated their exclusion either. Therefore, the limitation added represents new matter.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Applicant has claimed that the chalk is uncoated when it

is a part of the polyamide molding compound. A molding compound containing chalk and polyamide will inherently have the polyamide coating the chalk. This is the same argument that the Applicant has used for the olefin compound coating the chalk of Kumaki et al. (arguments filed 11/20/2008 page 11). The mineral filler cannot be identified as uncoated under the applicant's own definition.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Umetsu et al. (6,121,388) in view of Takagi et al. (5,001,181).

Umetsu et al. teach a molding composition preferably comprising nylon 6T/6I (column 3, lines 51-54). Umetsu et al. teach that the composition can comprise a filler to improve the mechanical strength of the composition. Calcium carbonate is listed (column 9, lines 50-67). A blank is any piece of material that can be made into something. Umetsu et al. mold their composition into vehicle lamp reflectors (column 12, lines 56-65). Umetsu et al. teach using 20 to 150 parts by weight of their filler. It is obvious to optimize the amount of filler for a desired mechanical strength. It is a result effective variable. See MPEP 2144.05.

Umetsu et al. fails to teach that the calcium carbonate is precipitated calcium carbonate with the particle sizes as claimed. Since Umetsu et al. is silent with respect to the particular type and size of calcium carbonate used the skilled artisan would look to the prior art to find a suitable calcium carbonate to provide impact strength to a composition comprising polyamide.

Takagi et al. teach that precipitated calcium carbonate is a type of calcium carbonate that can be advantageously used in polyamide molding compositions because it is in particulate form (column 7, lines 42-49). Takagi et al. teach that the precipitated calcium carbonate filler preferably has an average particle size of 50-300 nm because the smaller sizes further enhance the balance in physical properties of rigidity and impact strength (column 7, lines 10-23). They teach using an inorganic filler with an average particle size of 100 nm (example 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the precipitated calcium carbonate of Takagi et al. as the calcium carbonate of Umetsu et al. to further enhance the balance in physical properties of rigidity and impact strength. It would have been obvious to select an average particle size of 100nm or less because the smaller sizes to further enhance the balance in physical properties of rigidity and impact strength in polyamide compositions.

Since the composition of Umetsu et al. combined with Takagi et al. is the same as claimed it will have the same physical properties that have been claimed or the applicant has failed to claim a critical feature that is need to obtain the properties. The courts have stated that a chemical composition and its properties are inseparable.

Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705, 15 USPQ2d 1655, (Fed. Cir. 1990). See also *In re Best*, 562 F.2d 1252, 195 USPQ 430, (CCPA 1977). "Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established." Further, if it is the applicant's position that this would not be the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Umetsu et al. (6,121,388) and Takagi et al. (5,001,181) as applied to claims 1 and 4 above as evidenced by Salamone (Polymeric Materials Encyclopedia).

Umetsu et al. fails to teach the ratio of the dicarboxylic acids used. The claimed ratio is intrinsically within the range of PA 6T/6I. Salamone is being used as evidence to show that PA 6T/6I has a terephthalic acid percentage of 60-80% and an isophthalic percentage of 40-20% (page 6574). It would have been obvious to one of ordinary skill in the art to try any ratio, including 70/30, given that there is a finite number of ratios available and would expect them all to function in the same or similar capacity. It would have been obvious to have optimized the ratio for a desired glass transition temperature, melting point, and adsorption of moisture and solvents.

Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Umetsu et al. (6,121,388) in view of Takagi et al. (5,001,181) and Tahara et al. (6,165,407).

These are product by process claims. Process limitations in product claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. *"In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977).

"When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Therefore, the *prima facie* case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433.

See also *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985).

Umetsu et al. and Takagi et al. teach what is listed above.

Umetsu et al. fails to teach a method of making their vehicle reflectors.

Tahara et al. teach a method of making a vehicle head lamp reflector (column 24, lines 33-40) that is metallized directly by applying a metal coating through PVD (column

23, lines 34-39). The molded article constituting the reflector part is made using partially crystalline polyamide and calcium carbonate as a filler (column 24, lines 37-39, column 19, line 21, column 20, lines 9-10 and 65).

Since the compositions are similar it would have been obvious to one of ordinary skill in the art at the time the invention was made to have looked to the prior art for a method of making a reflector and to have used the method of Tahara et al. to make the vehicle reflector of Umetsu et al.

Since the method of making the molding composition and method of making the reflector are the same this combination would provide a reflector with the same physical properties such as an iridescence temperature above 220°C. The courts have stated that a chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705, 15 USPQ2d 1655, (Fed. Cir. 1990). See also *In re Best*, 562 F.2d 1252, 195 USPQ 430, (CCPA 1977). "Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established." Further, if it is the applicant's position that this would not be the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Umetsu et al. (6,121,388) in view of Takagi et al. (5,001,181).

Umetsu et al. teach a molding composition preferably comprising nylon 6T/6I (column 3, lines 51-54). Umetsu et al. teach that the composition comprises a filler to improve the mechanical strength of the composition. Calcium carbonate is listed (column 9, lines 50-67).

Umetsu et al. fails to teach that the calcium carbonate is precipitated calcium carbonate with the particle sizes as claimed. Since Umetsu et al. is silent with respect to the particular type and size of calcium carbonate used the skilled artisan would look to the prior art to find a suitable calcium carbonate to provide impact strength to a composition comprising polyamide.

Takagi et al. teach that precipitated calcium carbonate is a type of calcium carbonate that can be advantageously used in polyamide molding compositions because it is in particulate form (column 7, lines 42-49). Takagi et al. teach that the precipitated calcium carbonate filler preferably has an average particle size of 50-300 nm because the smaller sizes further enhance the balance in physical properties of rigidity and impact strength (column 7, lines 10-23). They teach using an inorganic filler with an average particle size of 100 nm (example 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the precipitated calcium carbonate of Takagi et al. as the calcium carbonate of Umetsu et al. to further enhance the balance in physical properties

of rigidity and impact strength. It would have been obvious to select an average particle size of 100nm or less because the smaller sizes to further enhance the balance in physical properties of rigidity and impact strength in polyamide compositions.

***Response to Arguments***

Applicant's arguments filed 5/6/2009 with respect to the new matter rejection have been fully considered but they are not persuasive.

The applicant has made the argument that the Office is not allowing the applicant to claim less than what is most broadly set forth in their specification.

The Office does not deny the applicant the right to specifically claim their invention. The problem is that the claims that are presented do so in an inappropriate manner. The applicant can and has claimed the specific inorganic filler of their invention. The Office has not denied that the applicant can claim a specific filler. The problem is that the specification does not contain the teaching that it is a part of the invention to exclude all other fillers. Also even if that were the case, which is not admitted, there is no support for claiming the **substantial** absence of other fillers. There is no teaching in the specification that trace amounts of other fillers may not be present. If it is the applicants' desire to limit the claims to a specific embodiment of their invention, it is suggested that they use closed language such as "consisting of" for the entire claim. Otherwise the applicant is attempting to exclude particular components from the composition while allowing anything else to be present and such teachings are not contained in the original specification.

Applicant's arguments with respect to claims 1-8 and 13-16 have been considered but are moot in view of the new ground(s) of rejection.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN USELDING whose telephone number is (571)270-5463. The examiner can normally be reached on Monday-Thursday 6:00am-4:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JOHN USELDING  
Examiner  
Art Unit 1796

Application/Control Number: 10/526,767  
Art Unit: 1796

Page 11

/Marc S. Zimmer/  
Primary Examiner, Art Unit 1796